

Climatological Data for October, 1910.
DISTRICT No. 3, OHIO VALLEY.

FERNAND J. WALE, District Editor.

GENERAL SUMMARY.

Considering the month as a whole, the weather prevailing during October, 1910, was unseasonably warm throughout the Ohio Valley district. The average temperature of the month was decidedly in excess in all sections, and high temperature records were broken at many places early in the month, when maximum temperatures of 90° to 98° were reached. Unusually high temperature prevailed during most of the first and all of the second decade. However, in contrast with this exceptional heat, near the end of the month and lasting for two or three days, there was some of the coldest and most wintry weather, with snow, that has been experienced in a general way over the district in October during the past quarter of a century. A temperature as low as 11° was registered in western North Carolina, 12° in southwestern Virginia, 14° in Tennessee, and 20° as far south as northern Georgia. Killing frost occurred at all places during the month and generally for the first time this autumn. Nearly everywhere its appearance was from one to three weeks later than the average first appearance in past years. In consequence no material damage was done. Precipitation was excessive over the western portion of the district, including western and central Ohio, being extraordinarily great in the lower Ohio River Valley. It was normal or below, but generally sufficient, over the rest of the district.

The most important weather event of the month was the torrential rains which fell over the lower valley, including southern Indiana, and portions of Ohio in the period October 3-6. During about 60 hours rain was practically continuous and amounts ranging from 6 to 15.5 inches were received in that space of time. These rains eclipsed in amount, over most of the area visited, anything of the kind previously experienced in those sections. Enormous damage resulted from the deluge of water. Great areas were flooded, bridges were carried away, and soil, crops, and houses were washed away in the flood. The greatest damage was done in the lower basin of the Wabash River in the southern portions of Indiana and Illinois, and in western Kentucky.

A full account of these rains and the damage done is given at the end of the summary, in a special article which includes also a chart exhibiting the area affected and the amounts of rainfall measured.

TEMPERATURE.

The average temperature of the month over the district, as a whole, was about 3° above normal, the excess ranging between 1° and 6° . In Pennsylvania and in Ohio, except in 1900, and in West Virginia, except in 1897 and 1900, the temperature averaged higher than for any other October during the past 20 to 25 years. Similar conditions also prevailed over other portions of the district.

The month opened unusually warm, the very warm weather continuing during four or five days, when some of the highest temperatures ever recorded so late in the year were registered in various parts of the territory under discussion. During this time the average daily temperatures were from 5° to 16° above normal, while maximum temperatures of 90° to 98° were registered in the various sections of the district, except that in western New York, western Maryland, West Virginia, and northern Georgia they were not over 85° . The records of high temperature for October were broken in Illinois and at many stations located in other States of the district. In several of the States the maximum temperature recorded in this period has been exceeded only once or twice in October during the past quarter of a century. Following this unusual heat a cool wave, with

temperatures somewhat below normal, obtained for a few days. But beginning about the 11th, another period of unusually warm weather set in and continued during the entire second decade, when average daily temperatures were again from 5° to 16° above normal, but the maximum temperatures, as a rule, were not quite so high as earlier in the month.

During the third decade conditions were decidedly more varied. First there was a brief cool spell with temperatures slightly below normal, then followed two or three days with temperature somewhat above normal, when finally there occurred, in the period 28-30th, the spell of intense wintry weather mentioned in the first paragraph. During these three days the daily temperature averaged from 8° to 25° below normal. Low temperature records for October were broken in many of the States, notably in Virginia, North Carolina, Georgia, Alabama, and Tennessee, while in Kentucky there occurred the second lowest temperature ever recorded in October in that State. The following remarkably low temperatures were registered the morning of the 30th: Banners Elk, N. C., 11° ; Marion, Va., 12° ; Mountain City, Tenn., 14° ; Beattyville, Ky., 17° ; Diamond, Ga., 20° ; Deer Park, Md., 15° ; and Riverton, Ala., 21° . There were also unusually low temperatures reported from other States, namely, 13° in New York, 14° in Pennsylvania, 15° in West Virginia and Indiana, 18° in Ohio, and 20° in Illinois. A most remarkable range in temperature for October is worthy of note. At Riverton, Ala., on the 1st the temperature registered 98° , while at Banners Elk, N. C., on the 30th it was 11° , a range of 87° . A singular feature of this great range is the fact that both the high and the low temperatures occurred in the southern portion of the district.

While light frost occurred in some of the mountain sections and other places in the northern portion of the district in September, yet the first general frosts of the season of consequence occurred during October. In Pennsylvania frost was general on the 13th, being killing in northern counties and the mountain districts. In Maryland the first killing frost occurred on the 8th, and in West Virginia on the 20th. In Ohio frosts were general on the 8th, freezing temperatures occurred in places in the Muskingum Valley on the 23d, and killing frosts were general in the southeastern portion on the 24th. In North Carolina the first killing frost occurred on the 23d. In other parts of the district the first killing frost, of any extent, attended the cold wave of the 28-30th. The appearance of killing frost this autumn was from one to three weeks later than the average date of past years in the different parts of the district, and from one month to six weeks later than the earliest record of this phenomenon. On account of the lateness of its occurrence the frost did little or no damage in any locality, while the extension of the growing season was beneficial.

PRECIPITATION.

Precipitation during the month was below normal in New York, Pennsylvania, except in the extreme northwestern portion, Maryland, West Virginia, the portions of Virginia and North Carolina in this district, over the southeastern portion of Ohio, in the Bluegrass and eastern portions of Kentucky, and in eastern Tennessee. Over these sections the monthly amount was generally between 1.5 and 2.5 inches; elsewhere in the district it was above normal, the excess increasing toward the lower Ohio River from all directions. Over the central and southern portions of Indiana and Illinois, central and southwestern Ohio, western Kentucky, and northwestern Tennessee, there was a decided excess. In these sections there occurred early in the month some of the heaviest, if not the heaviest,

rains that have ever fallen in this part of the country. These excessive rains raised the aggregate amount of precipitation for the month to two or three times the normal amount for October. 15.5 inches occurred at Golconda, Ill., between 12 and 13.5 inches at several other stations in southern Illinois, and 10 inches or more at stations in southwestern Indiana, and extreme western Kentucky. Over the rest of the territory where the precipitation was in excess, the amounts ranged between 4 and 10 inches.

Rain was quite general over the district in the period, 4th to 7th, being extraordinarily heavy in the lower Ohio Valley, as before mentioned. Between 6 and 15 inches of rain fell over the southern portions of Indiana and Illinois, over western Kentucky, and southwestern Ohio within 60 hours, and 24-hour amounts of 3 to 8 inches were common. Moderate rains were quite general in the period 21st-22d and snow in the period 27-29th. There were light to moderate rains in Kentucky, Tennessee, and Alabama in the period 13-15th, and in North Carolina and Virginia 17-20th, but over the rest of the district there was practically no precipitation from the 9th to the 20th, inclusive. From the 22d to the 30th, inclusive, precipitation occurred substantially every day in the extreme northeastern portion of the district, where, in fact, two-thirds of the monthly amount was received during the last decade.

A snowstorm, which extended to the most southern portion, swept over the district during the 28-30th. The snowfall which attended this storm was extremely unusual in amount for the season in nearly all parts of the district, but particularly in the southern portion. In Alabama, Georgia, and Tennessee was experienced the first snow ever reported in the month of October other than light flurries, and even flurries have occurred in Georgia and Alabama in only one other October of which there is a record. The snowfall for the other States composing the district was as follows: New York, 3 to 7.8 inches; western Pennsylvania, trace to 7 inches (the heaviest in October with one exception in 23 years); Ohio, trace to 1.5 inch; western Maryland, 1 inch; southwestern Virginia and western North Carolina, trace to 4 inches; Tennessee, Kentucky, and Illinois, trace to 1 inch; and Indiana, trace to 7 inches.

MISCELLANEOUS.

During an electric storm which passed over Montgomery County, Ky., during the night of the 1st-2d, a barn filled with tobacco, hay, and farming implements was struck by lightning and destroyed with its contents. Lightning also struck a residence in the same locality, doing some minor damage. Electric wires over the county were badly damaged, and many trees shattered.

On the 13th a severe rain and thunderstorm broke over the fair grounds at Owensboro, Ky., while the Daviess County fair was being held, doing considerable damage and causing a panic among the people attending.

A severe thunderstorm passed over the central portion of Ohio on the 16th, doing considerable damage. A woman was killed by lightning in Muskingum County; five barns were struck, four of them being destroyed, by lightning in Knox County; and hail did considerable local damage in Marion County.

THE HEAVY RAINFALL OF OCTOBER 3-6.

The remarkably heavy rains which fell over the central Mississippi and Ohio valleys October 3-6 were caused by a general distribution of pressure and general atmospheric conditions which are usually productive of heavy rains in those sections. An area of high pressure overspread the Appalachian Mountain region and Atlantic States, while a barometric depression slowly advanced across the Mississippi Valley, being retarded in its movement by the persistence of the high pressure area to the eastward. Warm, moist currents of air were therefore drawn into the central valleys from the Atlantic Ocean and the Gulf of Mexico.

On the morning of the 3d this high area overspread practically the entire country east of the Mississippi River, the barometer gradually increasing from 30.0 inches near the Mississippi River to 30.5 inches on the north Atlantic coast, while a barometric depression occupied the sections immediately west of the Mississippi River, extending from Manitoba to the Mexican border, with a secondary center in north-central Texas. On the morning of the 4th pressure continued high over the eastern districts, while another disturbance of decided energy was moving down over the eastern Rocky Mountain slope. This disturbance in a manner merged with the Mississippi Valley disturbance during the 4th, although the southwestern center continued to assert itself. During the 5th this general depression, narrowing considerably, moved slowly across the Mississippi Valley, while another high pressure area, with considerably lower temperatures, pushed eastward rapidly from the Rocky Mountain region to the Missouri Valley, the high pressure area continuing over the Appalachian Mountain region and Atlantic States, although slightly decreasing in force.

A chart herewith exhibits the amount and distribution of the rainfall over the area affected in District No. 3, and the following extracts from the summaries of section directors in the several States give in a general way an account of the rains and resulting damage:

Kentucky.—Beginning during the night of the 3d and continuing until the 6th, there fell over western Kentucky and over the counties along the Ohio River as far up as Campbell, the greatest amount of rain that has probably ever fallen over so large an area in so short a time in the history of the State. Rain fell in torrents almost continuously for from 48 to 60 hours, during which time amounts ranging between 4 and 10 inches were received at the various stations located in those sections. At Blandville, Ballard County, 10.1 inches fell within 60 hours, which the local observer states is the largest amount recorded in that locality within that time during the past 40 years. Twenty-four-hour records were broken at many stations, amounts ranging between 4 and 5.5 inches occurring at many of them in that period of time. At Louisville 5.06 inches of rain fell in 24 hours, the second largest amount ever recorded in that city within a similar period of time.

Immense damage was done by the deluge of water. Streams overflowed; bottom lands were flooded; tobacco, corn, and other crops washed away, and live stock endangered; county roads and railroads were washed out; and bridges by the hundreds were swept away, including several large railroad bridges. Traffic on several of the railroads traversing that section of the State was temporarily suspended. The loss from bridges destroyed, or injured, alone is estimated to be nearly \$1,000,000. Twenty-five bridges were swept away in Henderson County alone, and a number nearly as great in each of a score or more other counties. Over much of this section many bridges had been destroyed by the big flood in July last and had just been replaced when they were again swept away, together with many more that had withstood the previous flood. The total loss from the floods in the State will easily amount to between \$1,500,000 and \$2,000,000.—*F. J. Walz, District Forecaster, Louisville.*

Indiana.—A storm which eclipsed all previous records of heavy rainfall in Indiana began on the night of the 3d and continued until the 6th. Heavy rain fell during the greater part of the time, with but few intermissions, particularly in the southern part of the State, where 24-hour rainfalls of 3, 4, and in some cases 5 inches were recorded. This unprecedented rainfall swelled the streams in that district to flood stage, inundated the bottom lands, destroyed crops, washed away bridges, caused some loss of live stock, and forced a considerable number of people to abandon their homes for the time being.

At Rockport the Southern Railroad was under water in many places during the flood period, and some damage was done by the accumulation of débris on the tracks. At Petersburg trains were delayed, and in some instances schedules were canceled. Crops were reported to have suffered heavily in that section. A loss of \$5,000 was sustained at Bedford by damage to the dam of the Bedford Power Company. The American Drain Tile Company at Terre Haute suffered a loss estimated at \$50,000 by the flooding of their plant, and consequent damage to machinery and product of the kilns. The injury to crops was heaviest along the lower valleys of the White, Wabash, and Patoka rivers, where the levees were washed away in many places, and the corn and other crops were partially or wholly submerged. In the remainder of the southern half of the State the rainfall was heavy and streams overflowed, causing some damage, mostly of a minor character. While no accurate estimate can be given as to the total loss occasioned by the flood in the State of Indiana, it is probable that \$1,000,000 would not cover the damage from that cause.

The Ohio River at Evansville rose from a stage of 4.7 feet at 7 a. m. on the 4th to a crest of 26 feet at noon of the 9th. The flood stage at that place is 35 feet.—*Verne H. Church, Section Director, Indianapolis.*

Illinois.—The excessive rainfall of the 3d-6th was confined to the counties bordering on the Wabash and Ohio rivers. At Golconda, in Pope County, 15.24 inches fell in 60 hours, nearly 8 inches falling in 24 hours. The correspondent at that place writes:

"Regarding the torrential rains in this section the first part of October, would say that the record was broken in the amount and in the damage done. The east side of the county is hilly, and precipitation runs off very fast. Lusk Creek rises in the northeast part of the county, thence running a tortuous course, empties into the Ohio River just above (north of) Golconda. It drains about one-third of the county. The water rises very quickly, and runs out in the same way. During this flood it rose 10 feet higher than ever known before by the oldest inhabitant. The flood washed away all crops in the creek bottoms, making a clean sweep. A creek called the Big Bay, with its tributaries, drains the west side of the county, which, south of Glendale, is low and level. This section was inundated, and remained under water for nearly a week. A conservative estimate of the loss in corn alone is \$20,000. During this period railroad trains could not go beyond Brownfield, so we were without mail for four days."

The loss of crops was confined to limited areas, mostly in bottom lands, but the total damage will probably amount to \$100,000. The railroads suffered heavy losses to culverts and bridges.—*Wm. G. Burns, Section Director, Springfield.*

Ohio.—Excessive rains fell in southwestern and west-central Ohio on October 3 to 6. The fall was over 7.5 inches in northern Butler and Warren counties and was over 6 inches at all stations from there northeastward to Delaware County. Most of the rain fell on the 5th and 6th, and at many points it was the greatest ever recorded in October in so short a period.

Much damage was done by flooding in the valley of the Sandusky River, which was 0.5 foot above the flood stages at Tiffin and Fremont on the 7th. Slight damage was done at Fremont, but in the vicinity of Tiffin and above that city the damage to corn standing in shock in the lowlands amounted to thousands of dollars. It is reported that one man lost 60 acres of corn and another 35 acres. Telegrams were sent both these places on the morning of the 6th advising them that the river would reach the flood stage.

The Scioto River was out of its banks to a slight extent to the north of Columbus on the 7th and flooded all the low places along its course in the vicinity of Circleville on the 7th, 8th, and 9th. The river begins to overflow low places at that place at 7.0 feet on the gage and it reached 13.4 feet there on October 8 at 7 p. m. It did not quite reach the flood stage at Chillicothe. Much damage was done to corn, but warning messages sent on the morning of the 6th and again on the 7th enabled residents in the lowlands to drive out their stock and move portable goods.

The Great Miami River did not quite reach the flood stage at Piqua or at Dayton, but it was nearly 3 feet above the flood stage at Hamilton and considerable damage was done in the lowlands between Dayton and Hamilton and in the vicinity of the last-named place.

The Maumee River showed no material rise and none of the streams in the eastern portion of the State were affected to any great extent, the highest water at Zanesville being 11.8 feet on the 8th, or about 18 feet below the flood stage.

The heavy rainfall flooded all low places in Crawford, Wyandot, and Hancock counties.—*J. Warren Smith, Section Director, Columbus.*

WABASH LEVEE PROJECT.

Recent flood losses in the territory adjacent to the lower Wabash and Patoka rivers in southern Indiana have caused a renewal of interest in the project to build a system of levees along those streams. The inhabitants of these valleys are familiar from long experience with spring floods, but a fall flood is a different and more serious matter.

For some years past there has been agitation of the question of building these levees, and the first effort to take a practical step in that direction brought forth a torrent of remonstrances. The matter, however, has been thrashed out in the courts, and a commission has been appointed to investigate the cost of the levees and to apportion the assessments of the landowners who will be benefited. A civil engineer with a corps of assistants is now at work preparing plans for the work. The length of the proposed levee system is about 80 miles and the estimated cost is \$250,000, and it will require several years for its completion.

The Wabash River for a long distance constitutes the State line between Indiana and Illinois. In the event of the building of the levee on the Indiana side, similar embankments will have to be built on the Illinois side in self-defense, as the Indiana levee system would deflect the water in times of flood to the low lands in Illinois.

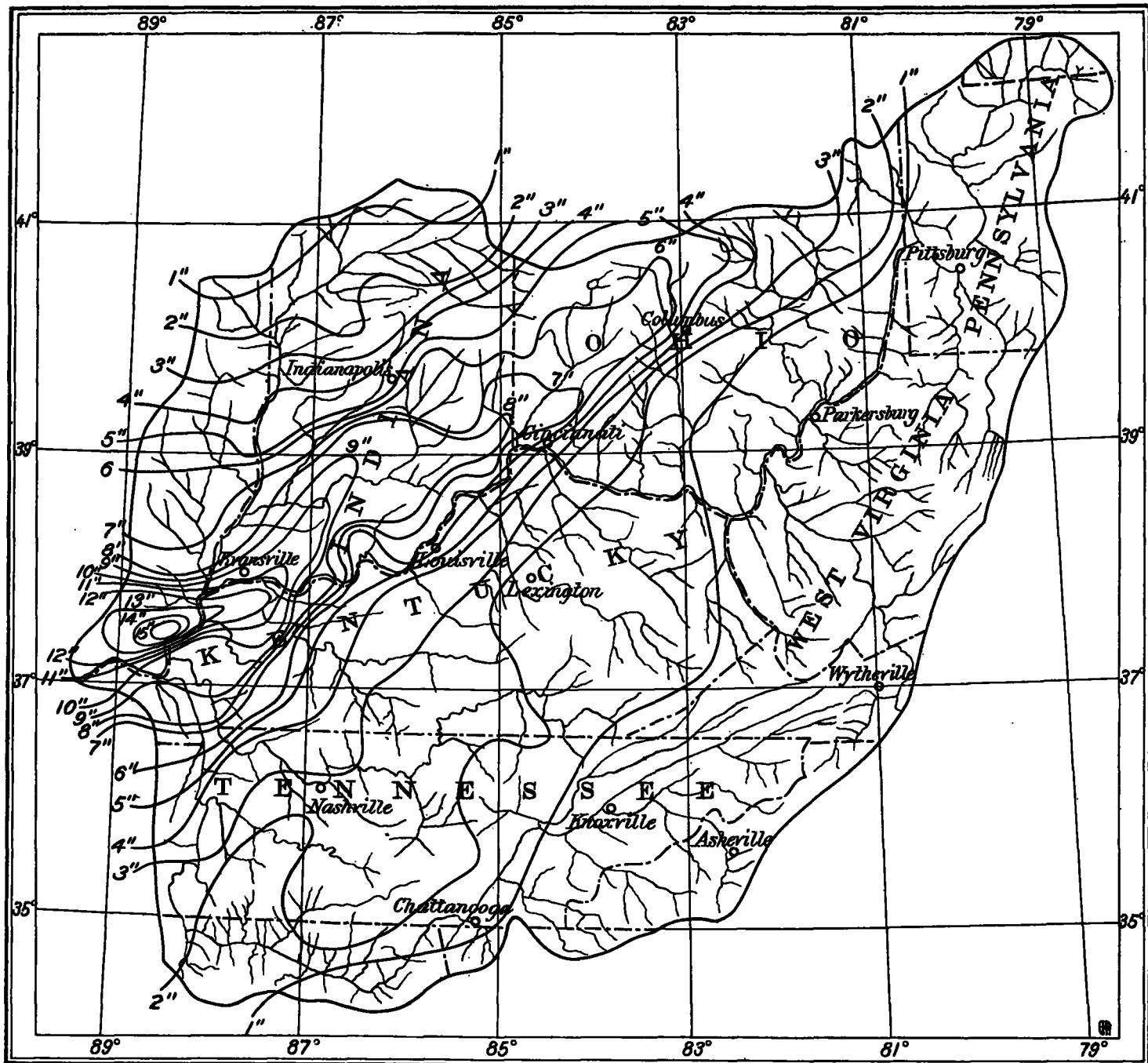


FIG. 1.—Heavy rainfall in the lower Ohio Valley, October 3 to 6, 1910.

TABLE 1.—Climatological data for October, 1910. District No. 3, Ohio Valley.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.				Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days.	Number of partly cloudy days.	Number of fully cloudy days.		
<i>New York.</i>																			
Allegany.	Cattaraugus.	1,441	4	52.0		83	18	17	30	49	3.73	-1.50	0.78	7.8	10	14	9	nw.	
Bolivar.	Allegheny.	1,800	16	49.0	+ 0.2	82	18	14	29	50	1.64	+ 0.93	0.68	3.0	6	12	8	sw.	
Franklinville.	Cattaraugus.	1,593	13	51.0	+ 1.5	79	18	13	29	43	4.46	+ 0.93	0.83	7.0	10	14	9	nw.	
Olean	do.	2									3.27		0.88		11			w.	
<i>Pennsylvania.</i>																			
Aleppo.	Greene.	1,135	9	57.4		89	3	19	30	50	1.80		0.85	T.	5	21	1	n.	
Baldwin.	Butler.	1,404	4	54.6		78	4	23	30	36	2.30		1.05	T.	10	13	10	w.	
Claysville.	Washington.	1,127	6	57.8		91	3	19	30	51	1.92		0.61	1.2	7	17	9	w.	
Franklin.	Venango.	955	36	54.2	+ 1.8	81	19	27	28	46	3.36	+ 0.48	0.72	2.0	11	16	6	w.	
Greenville.	Mercer.	950	14	53.2	+ 3.6	83	31	22	29	44	4.35	+ 1.13	1.32	3.4	11	21	3	nw.	
Indiana.	Indiana.	1,350	13	56.8	+ 6.0	88	3	22	30	44	1.89	+ 1.14	1.05	1.14	8	22	3	s.	
Johnstown.	Cambria.	1,184	22	56.7	+ 3.4	86	8	25	30	42	1.53	- 1.08	0.76	0.5	8	12	3	sw.	
Lycippus.	Westmoreland.	1,420	18	58.6	+ 5.1	83	5†	32	28	36	2.04	- 0.40	1.48	0.5	7	19	4	nw.	
Pittsburg.	Allegheny.	842	40	57.6	+ 2.8	84	3	28	30	36	1.69	- 0.63	0.78	T.	9	19	8	U. S. Weather Bureau.	
Saegerstown.	Crawford.	1,116	19	52.4	+ 2.1	81	18	14	29	42	5.23	+ 2.25	1.30	7.0	12	6	11	J. G. Apple.	
Skidmore.	Lawrence.	1,000	6	54.8		80	3†	21	29	40	1.85		0.75	1.0	4	24	0	W. H. Stoner.	
Somerset.	Somerset.	2,250	54	54.5	+ 6.1	86	5	18	30	42	1.58	- 1.22	1.07	1.0	4	10	14	7	W. M. Schrock.
Uniontown.	Fayette.	999	22	58.3	+ 4.8	87	5	26	30	40	1.48	- 1.52	0.80	T.	5	11	15	5	Wm. Hunt.
Warren.	Warren.	1,137	21	51.9	+ 1.0	80	4	21	22	44	3.92	+ 0.93	0.90	5.0	9	19	0	Anna Simpson.	
<i>Maryland.</i>																			
Deer Park.	Garrett.	16	51.8	+ 3.5	84	5†	15	30	42	1.31	- 0.96	0.53	1.0	6	...	...	...	S. P. Specht.	
Grantville.	do.	16	53.8	+ 3.9	84	5	18	30	35	1.44	- 0.89	0.62	2.0	6	14	6	11	J. S. Miller.	
Oakland.	do.	10	53.3		85	5	18	30	44	1.75		0.60	0.2	6	14	12	5	R. E. Weber.	
<i>West Virginia.</i>																			
Bancroft.	Putnam.	6	61.4		90*	3	26	30	40*	1.44		0.73	T.	5	20	0	11	ne.	
Beckley.	Raleigh.	2,440	11	57.4	+ 3.4	82	5†	18	30	40	1.89	- 0.51	0.69	1.5	4	19	5	w.	
Ben's Run.	Pleasants.	623	9	80.4	+ 5.1	92	3	26	30†	46	3.05	+ 0.49	1.05	T.	8	24	3	4	J. D. Riggs.
Bluefield.	Mercer.	2,563	15	58.1	+ 2.3	81	8	20	30	32	2.51	- 0.08	0.75	3.0	9	15	7	9	Norfolk & Western Ry.
Buckhannon.	Upshur.	1,472	20	56.1	+ 3.3	88	5	22	30	45	2.31	- 0.83	0.78	T.	6	24	1	6	H. A. Darnall.
Cairo.	Ritchie.	667	8	61.0	+ 4.8	90	4	25	30	36	2.08		0.60	0.0	5	2*	17*	11*	Van A. Zevely.
Central Station.	Doddridge.	900	11	56.4	+ 1.6	88	3	17	30	50	1.46	- 0.83	0.54	1.0	6	15	10	6	G. W. Sherwood.
Charleston.	Kanawha.	593	24	61.2		87	5	23	29	33	1.82	- 0.87	0.95	T.	4	21	2	3	R. C. Hewea.
Creston.	Wirt.	612	10	55.7		89	1	19	30	44	1.94	- 0.36	0.82	0.0	5	20	2	9	J. M. Reed.
Cuba.	Jackson.	544	9	58.8		87	1†	17	30	41	0.94	- 1.92	0.52	T.	4	18	9	4	C. T. Perry.
Elkhorn.	McDowell.	1,933	18	57.6	+ 2.2	82	5†	19	30	35	2.40	+ 0.07	0.71	3.5	7	23	5	3	J. J. Lincoln.
Elkins.	Randolph.	1,940	11	55.8	+ 4.5	85	3	22	30	45	2.21	- 0.21	0.59	1.4	9	11	13	7	U. S. Weather Bureau.
Fairmont.	Marion.	879	18	59.5		93	3	20	30	50	1.50	- 0.98	0.78	T.	6	...	...	...	H. Glenn Fleming.
Glenville.	Gilmer.	733	22	59.3	+ 4.7	89	3†	23	30	40	1.96	- 0.90	0.68	T.	4	14	2	15	John Holt.
Grafton.	Taylor.	985	18	58.6	+ 3.8	90	3†	22	30	40	2.64	+ 1.8	1.54	1.0	7	24	1	6	John W. Snider.
Green Sulphur Springs.	Summers.	1,600	14	57.4	+ 3.6	84	8	22	31	43	1.84	+ 0.37	0.42	1.0	11	20	3	8	John W. Dalton.
Hinton.	do.	1,400	21	50.6	+ 3.5	88	6	23	30	42	1.42	- 0.72	0.52	T.	10	21	6	4	J. B. Lsvender, C. E. L. H. Hutchinson.
Huntingdon.	Cabell.	510	15	59.4	+ 3.3	88	3†	26	30	37	1.84	- 0.21	1.00	T.	4	21	2	8	Geo. T. Abagrite.
Lewisburg.	Greenbrier.	2,200	10	50.0		80	5†	21	31	31	1.13	- 1.40	0.47	T.	4	24	1	8	H. C. Ragland.
Logan.	Logan.	665	8	64.4		93	21	27	30	40	1.51	- 0.73	0.78	T.	4	10	10	2	Allen Smith.
Lost Creek.	Harrison.	1,033	14	58.0	+ 3.8	89	3	22	30	51	1.55	- 0.73	0.78	1.0	5	20	3	8	S. E. Bradley.
Madison.	Boone.	704	7	57.3		87	5	25	30	37	2.07		0.56	4.0	7	14	9	5	Jas. A. Morgan.
Mannington.	Marion.	967	7	57.3		87	3	17	30	49	1.51		0.78	0.4	6	21	2	8	C. J. McCarty.
Marlinton.	Pocahontas.	2,169	11	50.7	+ 0.2	73	4	20	30	32	2.03	- 0.27	1.00	T.	4	19	2	7	Horace Atwood.
Morgantown.	Monongalia.	1,350	36	59.6	+ 4.7	88	3	23	30	37	1.77	- 1.21	0.88	T.	5	22	5	4	J. E. Matthews.
Moundsville.	Marshall.	640	8	58.9		91	3	21	30	50	2.03		0.70	T.	5	24	1	6	Frank S. Evans.
New Cumberland.	Hancock.	987	10	57.2	+ 3.1	86	3	22	30	46	1.75	- 0.82	0.67	T.	5	16	5	10	Wm. Ankron.
New Martinsville.	Wetzel.	634	17	61.6	+ 5.3	92	3	24	30	48	2.08	- 0.29	0.70	0.0	6	25	1	5	Stephen Tully.
Nuttallburg.	Fayette.	2,252	18	52.8		80	5	21	30	36	2.57	+ 0.37	0.71	0.2	8	20	5	6	U. S. Weather Bureau.
Parkersburg.	Wood.	638	22	59.6	+ 5.1	89	3	26	30	42	1.15	- 1.29	0.71	T.	7	14	7	10	J. W. Swisher.
Parsons.	Tucker.	1,662	11	54.4	+ 3.9	80	13	20	30	52	1.50	- 0.98	0.90	T.	4	18	9	4	J. D. Swidman.
Philippt.	Barbour.	1,192	18	57.6	+ 3.8	90	3	20	30	50	1.68	- 0.40	0.73	0.3	7	8	16	7	W. D. Cunningham.
Pickens.	Randolph.	2,785	20	53.4	+ 1.5	80	5†	15	29	34	2.98	- 0.48	0.79	3.0	7	21	3	8	W. V. Senter.
Pineville.	Wyoming.	2	553	553	553	91	3†	24	30	47	1.73	- 0.63	0.68	0.63	4	21	1	9	W. D. Holmes.
Point Pleasant.	Mason.	553	10	50.8	+ 3.4	83	3	24	30	47	1.46	- 0.88	0.84	T.	4	21	1	9	Dr. A. W. DeBell.
Powelton.	Fayette.	904	14															H. Scott.	
Princeton.	Mercer.	2,469	10	52.8		77	6	19	30	33	2.90	- 0.38	1.00	2.0	9	17	9	5	E. P. Turley.
Robertsburg.	Putnam.	1,591	9	59.1		92	3	24	30	45	1.13		0.68	T.	3	21	2	8	Wm. E. Ryan.
Ryan.	Roane.	639	7	57.1		88	3†	18	30	46	1.53		0.55	T.	3	13	8	4	G. M. Whisler.
Smithfield.	Wetzel.	6	55.0		83	20	20	30	37	1.93		1.01	T.	3	4	22	5	A. M. McKown.	
Spencer.	Roane.	710	7	53.2		95	3	17	30	56	1.49	- 1.13	0.79	T.	3	4	22	5	J. E. Baughman.
Sutton.	Braxton.	5	...															C. F. Dodge.	
Terra Alta.	Preston.	3,207	10	54.4		82	5	19	30	41	2.23		0.63	1.0	6	19	2		Shelton Clark.
Union.	Monroe.	7	54.4		82	32	2	18	31	50	1.19		0.59	0.0	3	10	19	2	Miss Blanche Pierson.
Valley Fork.	Clay.	7	61.6		82	32	2	18	31	50	1.19		0.59	1.0	6	19	2		D. H. Hamrick.
Webster Springs.	Webster.	1,500	7	56.4	+ 3.2	80	3	25	30	32	1.91	- 0.84	0.85	T.	5	18	8	5	C. P. Waugh.
Wellsbury.	Brooke.	1,225	10	56.4	+ 2.5	88	3†	20	30	48	1.80	- 1.16	0.72	1.8	7	20	7	4	Miss C. M. Davis.
Weston.	Lewis.	824	21	58.1		87													

TABLE 1.—Climatological data for October, 1910. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
<i>Ohio—Cont'd.</i>																			
Granville.	Licking.	960	28	56.2	+ 3.6	87	3	24	30	43	4.68	+ 2.27	1.75	T.	7	21	3	7	sw.
Gratiot.	do.	1,000	21	57.4	+ 4.5	85	3	21	30	42	1.75	+ 0.71	1.05	1.0	7	17	3	6	sw.
Green.	Adams.	500	17	61.7	+ 5.8	89	3	32	27	36*	T.	7	22	7	2	9	3	sw.	
Green Hill.	Columbiana.	1,135	18	53.1	+ 2.3	85	3	19	30	46	3.18	+ 1.12	1.30	0.3	7	19	9	3	sw.
Greenville.	Darke.	1,060	24	58.5	+ 4.4	83	3†	29	29†	32	5.54	+ 3.68	2.50	T.	6	17	8	6	w.
Hillsboro.	Highland.	1,063	31	58.6	+ 3.2	87	3	23	30	35	2.95	+ 0.86	2.18	T.	6	10	15	6	sw.
Ironton.	Lawrence.	575	27	60.8	+ 5.8	93	3	23	30	45	1.67	+ 0.76	0.62	T.	4	20	7	4	sw.
Jacksonburg.	Butler.	975	42	58.0	+ 2.3	88	3	25	30	38	7.96	+ 5.77	T.	5	22	7	7	ne.	
Kenton.	Hardin.	1,015	18	55.2 ^a	+ 2.5	85 ^a	4	25 ^a	30	48	5.62	+ 3.23	2.86	T.	7	15	8	8	sw.
Killbuck.	Holmes.	1,057	18	58.0	+ 4.0	86	3	28	30	39	1.50	+ 0.43	0.87	T.	4	23	5	3	sw.
Lancaster.	Fairfield.	598	15	58.0	+ 4.0	86	3	28	30	39	1.50	+ 0.43	0.87	T.	4	23	5	3	sw.
Lawsbe.	Adams.	900	7	56.0	+ 4.1	90	3	25	30	49	2.02	+ 0.28	0.87	0.5	8	12	10	9	s.
McConnelsville.	Morgan.	710	26	57.6	+ 4.1	86	3	26	30	41	1.41	+ 1.46	0.67	T.	7	19	6	6	s.
Marietta.	Washington.	627	90	50.0	+ 6.0	86	3	25	29†	40	7.44	+ 5.72	3.06	0.5	8	14	11	6	sw.
Marion.	Marion.	980	32	57.6	+ 4.2	88	3	25	30	42	5.57	+ 3.06	2.22	0.5	7	21	6	4	sw.
Mifflordton.	Knox.	1,200	18	56.8	+ 5.1	85	3	23	30	42	4.47	+ 0.47	0.98	1.0	9	21	7	3	sw.
Milligan.	Perry.	875	17	56.9	+ 3.2	91	3	19	30	56	2.83	+ 1.52	0.68	0.1	7	16	11	4	nw.
Millport.	Columbiana.	1,145	18	54.2	+ 2.3	94	3	21	30	46	2.37	+ 0.32	0.68	T.	5	18	0	13	se.
Nellie.	Coshocton.	850	10	56.0	+ 3.4	89	14	30	30	49	4.60	+ 2.66	1.50	0.0	6	21	5	5	w.
New Alexandria.	Jefferson.	1,050	25	57.0	+ 4.0	88	4	21	28†	45	2.55	+ 0.09	1.50	T.	3	20	8	3	sw.
New Berlin.	Stark.	1,100	18	56.0	+ 2.7	86	3	25	30	35	7.09	+ 5.08	3.72	T.	3	21	3	7	nw.
New Waterford.	Columbiana.	1,053	16	54.3	+ 2.7	83	3	22	30	46	2.58	+ 0.51	1.0	1.0	18	4	9	9	sw.
Ohio State University.	Franklin.	757	37	57.1	+ 5.0	88	3	27	29†	30	5.18	+ 3.05	2.22	0.3	6	20	6	5	sw.
Patskaw.	Licking.	997	18	50.9	+ 3.5	87	3	23	30	42	4.68	+ 2.43	1.80	0.9	8	15	11	3	sw.
Philo(1).	Muskingum.	1,018	15	58.8	+ 4.3	90	3	24	29	43	2.19	+ 0.29	0.62	0.3	7	20	7	4	se.
Piqua.	Miami.	847	2	58.0	+ 4.0	88	3	24	30	37	7.09	+ 2.80	T.	5	18	0	13	sw.	
Plattsmouth.	Clarke.	1,130	17	57.0	+ 2.7	86	3	25	30	35	7.04	+ 5.08	3.72	T.	3	21	3	7	nw.
Pomeroy.	Meigs.	781	28	59.2	+ 3.6	87	3	25	30	37	1.99	+ 0.70	1.21	T.	4	19	3	9	w.
Portsmouth.	Scioto.	527	79	59.2	+ 3.6	87	3	25	30	37	5.89	+ 3.14	T.	5	18	7	6	n.	
Prospect.	Marion.	909	18	55.6	+ 4.4	86	3	22	30	41	4.18	+ 1.87	2.10	T.	5	18	7	6	sw.
Rittman.	Wayne.	990	18	55.6	+ 4.4	86	3	22	30	41	4.18	+ 1.87	2.10	T.	5	18	7	6	sw.
Shenandoah.	Richland.	1,100	18	55.3	+ 3.6	88	4	24	29	45	4.69	+ 2.79	2.04	0.5	6	11	7	3	s.
Sidney.	Shelby.	855	27	57.0	+ 4.6	87	3	26	30	36	6.25	+ 3.79	3.25	0.2	5	21	1	9	sw.
Somerset.	Perry.	1,080	11	57.7	+ 2.5	90	3	24	30	37	2.93	+ 0.64	1.10	0.5	9	21	5	5	sw.
Springfield.	Clarke.	1,002	16	57.6	+ 2.7	86	3	25	30	35	6.74	+ 4.75	3.24	T.	7	16	11	4	sw.
Summerfield.	Noble.	1,187	4	57.6	+ 2.7	90	3	22	30	52 ^a	1.27	+ 0.29	0.29	T.	8	14	13	4	sw.
Thurman.	Gallia.	696	17	61.3	+ 5.4	93	3	33	29	45	1.50	+ 0.34	0.50	T.	4	14	11	6	sw.
Urbana.	Champaign.	1,031	40	56.4	+ 2.8	87	3	22	30	41	8.67	+ 4.48	3.50	0.5	6	19	8	4	w.
Warren.	Trumbull.	900	21	54.9	+ 3.5	85	3†	27	29†	44	3.45	+ 1.08	1.27	1.5	9	13	11	7	nw.
Waverly.	Pike.	590	27	60.4	+ 5.2	93	3	22	30	49	4.24	+ 0.33	0.63	T.	7	23	3	5	s.
Waynesville.	Warren.	700	25	58.4	+ 3.7	88	4	25	30	33 ^a	8.03	+ 5.89	4.38	T.	6	19	5	7	w.
Wooster.	Wayne.	1,030	30	54.9	+ 3.8	85	3	24	29†	42	5.34	+ 3.00	2.35	0.2	8	12	7	12	sw.
Youngstown.	Mahoning.	848	18	58.0	+ 3.8	88	3	24	30	34	3.75	+ 1.55	1.87	T.	8	20	0	11	w.
Zanesville.	Muskingum.	700	23	58.0	+ 3.8	86	3	24	30	34	2.20	+ 0.01	0.80	T.	8	16	1	14	s.
<i>Virginia.</i>																			
Big Stone Gap.	Wise.	1,540	19	58.8	+ 4.1	83	6†	21	30	36	1.30	+ 0.97	0.48	0.0	4	25	0	6	w.
Blacksburg.	Montgomery.	2,170	19	55.4	+ 3.0	80	3†	23	30	39	3.21	+ 0.53	1.20	0.5	10	15	8	6	w.
Burksgarden.	Tazewell.	3,350	15	51.9	+ 2.2	75	17	16	30	41	2.55	+ 0.62	0.73	4.0	6	16	7	8	n.
Els Knob.	Lee.	3,243	7	59.8	+ 5.0	80	5†	24	39	29	2.30	+ 0.98	0.5	8	19	7	5	nw.	
Galax.	Grayson.	2,300	15	57.0	+ 3.6	80	2	20	30†	42	4.02	+ 1.92	T.	5	18	3	10	nw.	
Ivanhoe ^{**\$} .	Wythe.	2,028	6	55.0	+ 2.8	78	2†	26	31	32	4.05	+ 1.28	0.5	14	17	11	3	w.	
Lebanon.	Russell.	2,131	18	56.6	+ 3.6	83	2	15	30	38	3.90	+ 0.57	3.0	6	21	7	3	nw.	
Marion.	Smyth.	2,224	15	56.4	+ 3.6	83	17	12	30	38	2.30	+ 0.28	0.65	3.0	6	22	6	3	w.
Max Meadows.	Wythe.	2,028	14	56.4 ^a	+ 2.9	81	31	22	30	38	2.33	+ 0.85	T.	8	20	0	11	w.	
Mendota ^{ss} .	Washington.	1,350	1	56.4	+ 2.5	85	2	15	30	44	2.47	+ 1.03	1.03	1.0	5	24	1	6	nw.
Radford ^{ss} .	Montgomery.	1,773	1	58.0	+ 3.1	80	2	23	30	34	2.34	+ 0.20	0.91	0.1	11	17	7	7	w.
Spears Ferry ^{ss} .	Scott.	1,221	14	56.7	+ 3.1	80	2	23	30	34	2.34	+ 0.20	0.91	0.1	11	17	7	7	w.
Wytheville.	Wythe.	2,393	17	56.7	+ 3.1	80	2	23	30	34	2.34	+ 0.20	0.91	0.1	11	17	7	7	w.
<i>North Carolina.</i>																			
Altapass.	Mitchell.	2,629	.....	61.4	.....	90	1†	18	30	48	1.43	+ 0.17	0.71	0.4	5	20	7	4	sw.
Andrews.	Cherokee.	1,800	.....	61.4	.....	84	2	20	30	34	2.64	+ 0.20	1.82	T.	7	19	7	5	sw.
Ashville.	Buncombe.	2,350	31	57.8	+ 2.5	84	2	20	30	34	2.64	+ 0.20	1.82	T.	7	20	11	0	n.
Banners Elk.	Transylvania.	3,750	2	52.0	.....	75	2	11	30	30	2.91	+ 0.20	0.64	4.9	11	21	4	6	w.
Bryson City.	Swain.	2,230	9	58.8	.....	83	9	15	30	44	2.88	+ 0.20	1.26	T.	5	20	11	0	n.
Cullowhee.	Jackson.	2,100	.....	60.4	.....	85	2	15	30	44	2.47	+ 0.93	1.68	0.31	1	7	6	6	nw.
Hendersonville.	Henderson.	2,167	14	57.0	.....	78	2	12	30	37	4.98	+ 0.17	2.39	0.5	5	17	9	5	se.
Highlands.	Macon.	3,670	20	54.2	+ 2.8	78	2	12	30	37	4.98	+ 0.17	2.39	0.5	5	17	9	5	w.
Hot Springs.	Madison.	1,326	12	61.8 ^a	+ 4.8	86 ^a	2†	21 ^a	30	42 ^a	4.47	+ 0.49	1.76	T.	5	20	11	0	n.
Jefferson.	Ashe.	2,800	3	58.2	.....	82	2	24	30	39	4.13	+ 0.17	1.75	0.2	7	12	8	11	w.
Marshall.	Madison.	1,646	9	60.7	.....	86	2	27	29	36	1.21	+ 0.17	0.72	0.2	6	20	11	0	n.
Murphy.	Cherokee.	1,614	34	56.0	.....	98	1	21	29	44	3.26	+ 0.39	1.08	0.5	6	19	6	6	nw.
Rock House.	Macon.	3,100	18	57.7	+ 2.0	80	2	19	30	32	3.53	+ 1.32	1.74	0.5	6	19	6	6	nw.
Waynesville.	Haywood.	2,756	16	56.0	+ 2.5	84	2	14	30	46	2.07	+ 0.31	0.88	2.5	8	18	11	8	sw.
<i>Georgia.</i>																			
Diamond.	Gilmer.	2,020	20	60															

TABLE 1.—Climatological data for October, 1910. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.			Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.
Tennessee—Cont'd.																			
Chattanooga.	Hamilton.	808	31	63.8	+ 3.0	89	2	28	30	35	2.29	- 0.55	1.22	T.	7	20	5	6	nw.
Clarksville.	Montgomery.	520	47	60.8	+ 1.1	88	3	27	30	39	4.58	+ 2.28	2.25	T.	7	22	3	6	n.
Clinton.	Anderson.	22									1.05	- 1.25	0.55	T.	3	23	0	8	se.
Dandridge.	Jefferson.	6									2.32		0.80	T.	4	26	5	5	w.
Decatur.	Melga.	850	14	62.3	+ 2.5	93	2	19	30	45	1.80	- 1.20	0.78	T.	7	23	1	7	sw.
Dickson.	Dickson.	800	14	61.2	+ 0.9	91	2	24	29	44	3.40	+ 1.21	1.40	T.	6	16	9	8	n.
Dover.	Stewart.	15	61.6	+ 1.4	96	2	24	30	43	6.27	+ 3.89	4.07	T.	3	16	8	7	s.	
Dunlap.	Sequatchee.	728	1	62.6		93	2	20	30	46	2.21		1.22	T.	3	25	0	4	e.
Elizabethhton.	Carter.	1,575	20								1.52	- 0.57	0.72	T.	3	25	0	6	Chas. Boyd.
Erasmus.	Cumberland.	1,850	13	57.5	+ 1.5	87	2	16	30	46	3.19	- 0.38	2.18	T.	7	17	8	6	U. S. Weather Bureau.
Florence.	Rutherford.	560	28	61.8	+ 2.4	91	2	24	30	36	2.79	+ 0.48	1.85	T.	6	19	5	7	J. E. Swann.
Franklin.	Williamson.	655	20	61.4	+ 1.9	90	1	26	30	39	2.62	+ 0.31	1.10	T.	6	18	4	9	J. W. Lillard.
Halls Hill.	Rutherford.	8									4.33		1.03	T.	7	19	0	12	N. R. Sugg.
Harriman.	Roane.	841	15	61.4	+ 2.7	88	2†	21	30	37	1.99	- 0.56	1.48	T.	2	18	9	4	A. M. Tippit.
Hohenwald.	Lewis.	933	24	61.8	+ 3.3	92	3	23	30	40	2.71	+ 0.49	1.25	T.	5	22	6	3	S. B. Boyd.
Iron City.	Lawrence.	13	62.2	+ 1.6	92	3	23	30	43	4.61	+ 2.31	1.78	T.	7	23	1	1	Robert R. Ayers.	
Jefferson City.	Jefferson.										1.17		0.50	T.	4				John Lutzelman.
Johnson City.	Washington.										2.15		0.68	T.	5				Capt. H. P. Seavy.
Johnsonville.	Humphreys.	384	14	60.8	+ 0.8	92	2	24	30	40	4.34	+ 2.12	2.38	T.	6	19	5	7	Calvin Maddox.
Jonesboro.	Washington.	1,740	15																Ward Crosby.
Kingston.		19																	Miss Sallie B. Matthews.
Knox.	Roane.	977	39	62.0	+ 3.9	87	2	24	30	34	1.68	- 0.93	0.68	T.	4	23	0	8	Robert A. Lovegrove.
Lebanon.	Wilson.	522	1	64.2		93	2	32	29	37	3.26		1.76	T.	5	11	1	10	H. Crumbllies.
Lewisburg.	Marshall.	727	15	63.3	+ 3.0	93	2	25	30	43	3.80	+ 0.96	2.15	T.	7	20	1	10	U. S. Weather Bureau.
Livingston.	Overton.																	Logan Fields.	
Loudon.	Loudon.	816	7								1.25	- 0.71	0.63	T.	1	11	3	11	Dr. R. D. Crutcher.
Lynville.	Giles.	770	22	62.0	+ 2.0	88	3	24	30	37	3.23	+ 0.73	2.23	T.	6	24	3	4	E. C. Knight.
McGhee.	Monroe.	6									1.36		0.52	T.	5	23	0	8	Robert W. Clark.
McMinnville.	Warren.	1,011	26	61.6	+ 3.3	90	2	21	30	42	4.67	+ 2.06	2.00	T.	8	20	4	7	Alice L. Hendricks.
Maryville.	Blount.	1,080	14															J. T. Sparkman.	
Mountain City.	Johnson.	2,486	13	55.8	+ 2.8	82	2	14	30	43	2.42	- 0.49	2.72	T.	7	17	14	0	E. E. Benedict.
Nashville.	Davidson.	654	39	63.0	+ 2.7	91	2	27	30	38	3.20	+ 0.72	2.41	T.	3	24	2	5	U. S. Weather Bureau.
Newport.	Cooke.	1,280	20	60.4	+ 2.8	84	3†	23	30	31	2.30	+ 0.23	1.20	T.	5	22	1	8	Dr. C. T. Burnett.
New River.	Scott.	215	3								3.50		3.05	T.	3	25	0	6	Burl W. Buttram.
Palmetto.	Bedford.	770	17	63.1	+ 1.1	93	2	25	29	42	2.79	+ 1.24	2.00	T.	7	18	6	7	Mrs. Ross Woods.
Pinewood.	Hickman.	3	60.8			92	1†	19	29	41	3.11		1.80	T.	7	18	2	11	Miss Carrie Cash.
Pope.		13									4.35	+ 1.76		T.	4	20	7	4	Miss Bessie Howard.
Rogersville.	Hawkins.	1,150	25	61.4	+ 4.9	89	2†	19	30	43	1.46	- 1.01	0.54	T.	5	24	5	2	Fred. Beal.
Rugby.	Morgan.	1,410	23	58.3	+ 3.1	88	2	15	30	48	3.24	+ 0.94	1.45	T.	5	22	1	8	S. G. Wilson.
Savannah.	Hardin.	442	26	62.6	+ 2.3	90	3	25	29	35	3.51	+ 1.31	2.35	T.	5	20	4	7	W. F. Bell.
Sevierville.	Sevier.	4	61.0			89	6	19	30	41	1.58		0.86	T.	3	12	8	11	H. O. Eckel.
Sewanee.	Franklin.	2,000	14	62.7	+ 4.1	86	2	25	30	33	4.46	+ 1.36	2.65	T.	5	18	0	13	University of the South.
Sparta.	White.	920	4	63.0		89	2	24	30	43	4.22		2.15	T.	6	20	1	10	E. H. Hull.
Springdale.	Clairborne.	1,058	20			92	2	22	29	43	7.33		5.86	T.	9	22	5	4	Mrs. Lucy E. Breeding.
Springville.	Henry.	377	7	60.8							1.39	- 1.36	0.66	T.	1	4	4	5	A. H. Boden.
Tazewell.	Clairborne.	13				91	2	22	30	38	4.28	+ 1.65	1.85	T.	8	18	10	3	J. C. Carr.
Tullahoma.	Coffee.	1,075	23	61.0	+ 3.1	91	2	22	30	38	4.28		1.90	T.	8	17	9	5	R. T. Moore.
Walling.	White.	909	7			91	2	22	29	38	3.48		1.90	T.	8	17	5	9	J. K. Roberts.
Waynesboro.	Wayne.	753	24	62.2	+ 3.3	91	2	22	29	40	3.18	+ 1.24	1.34	T.	5	17	9	5	H. C. Boyd.
Wilderville.	Henderson.	13	60.9	+ 0.7	89	2	24	29	38	5.06	+ 2.24	2.80	T.	5	19	2	10	W. R. Wilson.	
Worsham.	Sumner.	9									4.55		3.55	T.	4	22	0	9	J. G. Elizer.
Yukon.	Lincoln.	850	13	61.8	0.0	92	2	26	29	32	4.38	+ 1.63	2.77	T.	6	19	5	7	W. P. Watson.
Kentucky																			
Alpha.	Clinton.	16	61.5	+ 2.4	85	2†	26	30	34	3.40	+ 0.90	2.10	T.	3	21	0	10	W. W. Hicks.	
Anchorage.	Jefferson.	700	9	58.2	+ 2.3	88	3	22	29	40	6.37	+ 3.76	3.38	T.	5	23	2	7	C. E. Barrett.
Bardstown.	Nelson.	837	14	60.8	+ 1.6	80	1†	24	30	44	2.60	+ 1.79	1.72	T.	5	22	2	7	G. M. Talbott.
Beattyville.	Lee.	650	7	59.6		89	3†	17	30	45	2.18		1.56	T.	7	11	7	13	G. W. Cann.
Beaver Dam.	Ohio.	441	7	60.4		92	2	26	29	43b	5.23		4.30	T.	4	23	0 ^a	7 ^a	T. S. Woodward.
Berea.	Madison.	1,070	9	60.8		86	17	24	30	42	2.67	+ 0.57	1.00	T.	6	22	4	5	C. F. Rumold.
Bowling Green.	Warren.	500	21	61.6	+ 2.7	92	2	22	30	42	3.20	+ 1.31	1.50	T.	8	24	0	1	Mrs. L. G. Causey.
Burnside.	Pulaski.	773	20								2.42	+ 0.12	1.78	T.	4	16	2	13	G. M. Estes.
Cadiz.	McLean.	8	62.8			94	1	24	29	42	9.71			T.	6	22	5	4	F. T. Street.
Catlettsburg.	Boyd.	397	7	62.4		94	1	27	29	38	10.61		4.82	T.	8	16	9	6	W. A. Taylor.
Earlington.	Hopkins.	544	17			94	1	27	29	38	1.62	- 0.83	0.98	T.	5	25	0	6	Mrs. Mertie M. Bruna.
Edmonton.	Metcalfe.	370	21	61.1	+ 2.1	85	2	25	29	41	7.51	+ 5.27	5.30	T.	7	25	0	8	J. B. Atkinson.
Eubank.	Pulaski.	600	19	59.8	+ 2.9	89	2	22	30	40	3.18	+ 1.00	1.82	T.	6	19	6	8	Miss Lee Ray.
Falmouth.	Fayette.	1,177	16	59.6	+ 3.0	87	2	25	29	44	3.11	+ 0.99	1.94	T.	6	19 ^d	1 ^d	7 ^d	W. H. Henderson.
Farmers.	Perry.	530	21			91	3	18	30	43	2.53		1.00	T.	5	17	10	4	J. V. Oldham.
Frankfort.	Christian.	524	14	61.1	+ 1.1	95	2	24	29	40	6.35	+ 4.12	3.85	T.	7	21	1	9	Miss Gertrude Sorrell.
Franklin.	Breckinridge.	512	15	59.2	+ 6.1	85	1†	27	30	35	5.57	+ 3.11	2.90	T.	4	24	2	5	J. H. Roberts.
Greensburg.	Grayson.	681	17	62.7	+ 3.4	92	2	24	29	38	4.14	+ 2.24	2.46	T.	6	23	8	11	L. C. Alcorn.
Highbridge.	Jessamine.	551	18	58.0	+ 1.3	90	2†	13	30†	48	2.93	+ 0.64	1.25	T.	6	20	0	11	Miss Lulu Wood.
Hopkinsville.	Christian.	524	14	61.1	+ 1.1	95	2	24	29	40	6.35	+ 4.12	3.85	T.	7	20	1	10	W. F. Randle.
Irvine.	Grayson.	635	15	59.8	+ 2.0	89	2	25	29	38	5.06	+ 3.97	2.14	T.	3	23	3	5	W. J. Piggott.
Lexington.	Fayette.	989	23	59.8	+ 3.1	84	3	25	29	31	1.67	- 0.55	1.07	T.	6	24	0	7	John E. Stone.
Loretto.	Marion.	681	13	59.8	+ 0.7	84	1	25	29	38	2.97	+ 0.95	0.20	T.	5	24	0	7	U. S. Weather Bureau.
Louisville.	Jefferson.	525	38	61.6	+ 3.2	89	1	26	30	42	6.70	+ 4.07	5.06	T.	6	21	5	5	Loretto Academy.
Marion.	Crittenden.	524	14	60.2	+ 2.4	92	3	24	30	43	2.18	- 0.06	1.14	T.	6	23	3	8	U. S. Weather Bureau.
Maysville.	Mason.	520	17	62.0	+ 5.8	88	2	20	30	41	1.22	- 0.95	0.37	T.	6	21	5	1	B. C. Paris.
Middlesboro.	Bell.	1,128	17	60.0	+ 5.8	88	2</td												

TABLE 1.—*Climatological data for October, 1910. District No. 3—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest. Date.	Lowest. Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeasured.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.		
<i>Indiana—Cont'd.</i>																	
Bloomington.	Monroe.	744	15	57.0	+ 0.1	85 3†	25 29†	39	9.31	+ 5.78	4.02	0.3	8 22	3 6	sw.	Earl E. Ramsey.	
Blufonton.	Wells.	835	15	56.4	+ 3.0	86 3	26 30	39	2.37	+ 0.18	1.23	T.	6 20	6 5	sw.	Prof. P. A. Allen.	
Butterville.	Jeanings.	767	25	59.0	+ 4.1	89 1	23 29	40	9.28	+ 6.66	4.58	1.5	6 24	0 7	...	C. F. Hole.	
Cambridge City.	Wayne.	941	19	54.6	+ 2.2	85 10†	22 30	44	5.81	+ 3.20	2.96	T.	7 25	0 6	w.	Charles Lemberger.	
Columbus.	Bartholomew.	632	27	57.3	+ 2.8	88 3	25 30	40	8.91	+ 4.24	4.12	0.0	6 21	1 5	sw.	John A. Perry.	
Connersville.	Fayette.	769	28	57.3	+ 4.3	89 3	24 29	42	7.44	+ 4.83	4.29	0.5	6 19	6 6	w.	C. C. Hibbs.	
Delphi.	Carroll.	663	25	57.2	+ 5.3	88 17	25 29	38	1.88	- 0.21	0.89	0.0	7 21	5 5	...	L. A. Higginbotham.	
Eminence.	Morgan.	782	4	58.3		83 3	22 29	35	5.51		2.40	T.	4 23	3 5	w.	Dr. E. E. Kelso.	
Evansville.	Vanderburg.	386	34	61.4	+ 3.4	90 1	29 29	30	11.19	+ 8.09	6.91	T.	6 19	4 4	s.	U. S. Weather Bureau.	
Farmersburg.	Sullivan.	12	57.9	+ 1.4	85 3	25 29	40	5.43	+ 2.47	3.10	0.2	7 22 ^a	0 4 ^a	se.	Maurice Yeager.		
Farmland.	Randolph.	1,101	28	56.6	+ 4.0	83 3	29 29	31	5.44	+ 3.15	2.00	0.3	8 19	2 10	sc.	W. J. Davison.	
Greenfield.	Hancock.	905	7	56.6		83 3	29 29	31			2.30	T.	6 24	5 5	s.	Prof. W. C. Goble.	
Greensburg.	Decatur.	954	14	58.0	+ 1.6	85 3†	23 29	33	7.08		4.02	1.0	5 24	1 6	nw.	Chas. Ewing.	
Huntingburg.	Dubois.	2	60.8			90 1	26 30	44	10.30		4.45	0.0	3 20		...	H. Dufendach.	
Huntington.	Huntington.	741	17	56.3	+ 3.5	82 18	28 29	30	1.81	- 0.67	0.65	T.	6 20	4 7	sw.	Chas. McGrew.	
Indianapolis.	Marion.	823	39	58.6	+ 3.6	84 3	26 29	32	5.32	+ 2.53	3.40	T.	8 22	3 6	s.	U. S. Weather Bureau.	
Jeffersonville.	Clark.	455	28	60.0	+ 0.7	88 3†	29 29	31	6.77	+ 4.38	5.16	T.	6 20	5 6	nw.	John C. Loomis.	
Judyville.	Warren.	3	56.3			85 16†	15 29	42	2.43		1.37	T.	7 12	11 8	sw.	Dale R. Warwick.	
Kokomo.	Howard.	840	18	56.3	+ 2.3	84 3†	23 29	42	2.70	+ 0.52	1.02	T.	6 19	9 3	sw.	P. H. Robertson.	
Lafayette.	Tippecanoe.	617	31	56.8	+ 3.5	85 17	24 29	34	2.58	+ 0.21	1.64	T.	8 22	0 9	s.	Wm. J. Jones, jr.	
Logansport.	Cass.	620	30	57.5	+ 4.4	91 17	24 29	43	3.27	- 0.23	0.78	T.	7 21	1 9	e.	Chas. Massena.	
Madison.	Jefferson.	460	18	59.9	+ 2.4	90 3	26 30	38	8.38	+ 5.86	4.36	T.	6 20	3 8	sw.	Dr. J. Cooperider.	
Marengo.	Crawford.	363	28	57.4	+ 0.8	87 1	23 30	37	5.98	+ 2.33	4.00	T.	6 24	1 6	sw.	J. M. Johnson.	
Marion.	Grant.	814	24	56.3	+ 3.0	86 3	25 29	35	2.62	+ 0.53	0.59	0.8	8 17	6 6	sw.	James F. Hood.	
Markle.	Huntington.	814	15	55.6	+ 2.3	85 3	25 29	37	4.00	+ 1.37	2.00	1.0	5 16	10 5	sw.	I. S. Shideler.	
Mauzy.	Rush.	980	30	57.0	+ 4.9	87 3	22 29	40	7.41	+ 4.54	3.99	0.7	7 19	5 7	sw.	Elwood Kirkwood.	
Monticello.	White.									2.26		1.30	T.	5 20	7 4	s.	J. E. Loughry.
Moores Hill.	Dearborn.	9	58.3			88 3	24 29	38	8.73		4.30	0.2	7 24	1 6	nw.	W. S. Bigney.	
Mount Vernon.	Posey.	416	24	60.4	+ 3.2	90 1	27 29	37	10.50	+ 7.43	4.36	T.	6 25	0 6	n.	Chas. M. Spener.	
Paoli.	Orange.	611	13	50.2	+ 2.1	88 1	24 29	44	8.48	+ 5.05	4.37	T.	6 20	8 5	sw.	James A. Gillum.	
Princeton.	Gibson.	481	29	50.8	+ 3.9	90 1	24 29	41	6.88	+ 4.43	3.50	T.	3 25	2 4	...	Elisha Jones.	
Richmond.	Wayne.	972	25	55.4	+ 2.4	86 3	24 30	38	6.72	+ 3.95	4.08	0.9	5 18	7 6	...	Walter Vossler.	
Rockefeller.	Fulton.	775	7	57.7		79 3†	24 29	33	2.71		0.73	7.0	8 17	9 5	...	G. P. Keith.	
Rockville.	Parke.	722	24	57.6	+ 3.0	82 16†	23 29	32	3.95	+ 1.53	1.78	T.	7 20	2 9	s.	Dr. W. N. Wirt.	
Rome.	Perry.	370	7	61.9		92 1	27 29†	41	8.52		4.48	T.	5 19	6 6	w.	Adam Ansbach.	
Salamonia.	Jay.	5	55.2			85 3	27 29	36	5.02		2.06	0.5	6 17 ^a	4 ^a 7	sw.	Chas. Skinner.	
Salem.	Washington.	717	17	57.8	+ 1.9	83 1	23 30	39	3.95	+ 6.10	4.80	0.5	6 19	3 9	w.	Emmet S. Allen.	
Scottsburg.	Scott.	570	16	59.1	+ 2.1	86 3	28 29	31	8.56	+ 6.01	4.96	0.5	5 21	4 6	n.	Frank H. Park.	
Seymour.	Jackson.	610	23	59.4	+ 3.8	89 17†	22 29	39	6.91	+ 3.93	3.70	T.	5 14	11 6	w.	J. Robt. Blair.	
Shelbyville.	Shelby.	6	57.0			85 3†	23 29	39	8.88		3.05	2.0	5 16	10 5	sw.	Edgar A. Hodson.	
Terre Haute.	Vigo.	498	20	60.6	+ 3.4	85 3†	27 29	39	5.38	+ 3.13	2.18	0.0	5 19	3 4	sw.	Prof. R. G. Gillum.	
Veedersburg.	Fountain.	612	11	58.6	+ 2.0	88 17	22 29	43	3.41	+ 0.92	2.15	T.	7 20	6 5	s.	L. A. Culver, jr.	
Vevey.	Switzerland.	525	29													Mrs. Frederica Boerner.	
Vincennes.	Knox.	431	18	59.0	+ 1.7	89 3	25 29	39	8.80	+ 5.74	3.20	T.	5 23	2 6	s.	Garrett V. List.	
Washington.	Davies.	484	14			84 3	23 29	38	3.54		1.53	T.	5 17	8 6	e.	Homer B. Turrell.	
Whitestown.	Boone.	2	55.0			86 17	29 30	43	1.85		0.64	4.5	9 12	15 4	w.	C. A. Stevenson.	
Winona Lake.	Kosciusko.	3	57.2			86 3	24 29	34	7.41	+ 4.73	3.90	T.	6 16	11 4	sw.	Rev. Albert A. Young.	
Worthington.	Greene.	526	28	58.6	+ 3.1	86 3	24 29	34								D. W. Soliday.	
<i>Illinois.</i>																	
Albion.	Edwards.	531	19	59.5	+ 2.7	87 1	25 29	29	7.27	+ 4.93	3.42	0.2	6 22	4 5	s.	B. F. Michels.	
Charleston.	Coles.	720	25	57.8	+ 3.3	84 3	22 29	38	4.53	+ 1.89	3.06	0.1	8 19	7 5	s.	Jacob B. Daisy.	
Danville.	Vermilion.	604	9	59.0		87 16†	23 29	39	2.45		1.48	T.	4 24	0 7	...	J. J. Lemon.	
Equality.	Gallatin.	421	12	62.2	+ 2.3	95 1	25 29	36	13.17	+ 6.49	5.47	T.	5 23	6 3	s.	Dr. L. W. Gordon.	
Fairfield.	Wayne.	495	17	59.6	+ 1.5	90 1	24 29	40	7.45	+ 5.08	3.85	T.	6 33	0 8	ne.	Geo. A. Tromly.	
Flora.	Clay.	495	24	59.1	+ 3.5	97 2	23 29	42	7.17	+ 4.74	3.40	T.	5 24	3 4	nw.	Jos. S. Peak.	
Golconda.	Pope.	500	32	60.4	+ 0.8	94 1	25 29	38	15.40	+ 12.46	7.99	0.0	4 20	2 9	sw.	Dr. D. Lawrence.	
Hooperston.	Vermilion.	715	8													S. F. Hoskinson.	
McLeansboro.	Hamilton.	462	27													C. C. Judd.	
Martinsville.	Clark.	630	22	59.0	+ 3.5	89 1	22 29	43	6.10	+ 4.11	2.50	1.0	6 21	3 7	s.	G. M. Daugherty.	
Mount Carmel.	Wabash.	424	9	59.0		88 1	27 29†	38	8.12		3.10	T.	4 24	0 7	n.	Mrs. H. M. Phillips.	
New Burnside.	Johnson.	556	15	61.7	+ 2.6	94 2	29 30	36	12.48	+ 9.28	5.86	T.	5 20	4 7	e.	Geo. Harris.	
Olnay.	Richland.	486	23	60.2	+ 3.7	90 1	25 29	40	6.55	+ 4.27	2.69	0.2	8 18	9 4	n.	Victor E. Phillips.	
Palestine.	Crawford.	500	28	60.6	+ 5.2	88 3	26 29	38	6.64	+ 4.10	3.00	0.5	6 19	2 10	sw.	Duane Shaw.	
Paris.	Edgar.	600	17	56.4	+ 1.7	83 3	23 29	34	3.90	+ 1.74	1.85	T.	4 21	6 4	sw.	H. P. Twyman.	
Philo.	Champaign.	700	26	55.8	+ 2.8	84 3†	20 29	41	2.68	+ 0.50	1.28	T.	4 21	6 4	sw.	H. A. Burr.	
Rantoul.	do.	768	19	58.4	+ 3.0	87 17	20 29	41	1.45	- 0.35	0.56	T.	5 22	4 5	nw.	Wm. Breiner.	
Robinson.	Crawford.	500	10	60.4	+ 3.1	90 1	25 29	39	4.05	+ 1.30	2.80	0.7	5 19	6 6	sw.	A. P. Woodworth.	
Sumner.	Lawrence.	459	4	58.8		84 1†	25 29	37	7.80		3.41	0.0	4 21	6 4	s.	O. A. Fyffe.	
Tuscola.	Douglas.	644	17													E. W. Lester.	
Urbana.	Champaign.	725	8	57.0		83 16†	21 29	38	1.34		0.64	T.	6 14	14 3	sw.	Prof. J. G. Mosier.	

•, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

* Precipitation included in that of the next measurement.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

‡ Separate dates of falls not recorded.

§ Data are from standard instruments not supplied by the U. S. Weather Bureau.

|| Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

|| Estimated by observer.

¶ Precipitation for the 24 hours ending on the morning when it is measured.

** Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for October, 1910. District No. 3, Ohio Valley.*

Stations.	River basins.	Day of month.																													Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
New York.																																			
Allegany.	Allegheny.					.25	.78	.28															.60	.13		.63	.12	.23	.22	.49	T.		3.73		
Bolivar.	do.					.10	.33	.20															.68	.10		.50	T.	.65	.70	.40	T.		1.64		
Franklinville.	do.	.02				.33	.33	.21															.47	.35	T.	.50	T.	.65	.70	.40	T.		4.48		
Olean||	do.	.07				.10	.88																.65	.08		.40	.20	.11	.30	.47	.01		3.27		
Pennsylvania.																																			
Aleppo.	Ohio.																																		
Baldwin.	Allegheny.					.06	.30	.07																.85	.05		.22	T.	.08					1.80	
Beaver Dam||	Ohio.																																		
Bradford.	Allegheny.	.09				.21	.90	.05																										2.30	
California.	Monongahela.																																		
Clarion.	Allegheny.																																		
Claysville||	Ohio.					.60	.25																											1.62	
Confluence||	Youghiogheny.																																		
Davis Island Dam||	Ohio.					.05	T.	.45																										1.48	
Derry Station.	Allegheny.																																		1.61
Franklin.	do.	.02				.36	.68	.46																									1.98		
Frederick||	do.	.05																																	3.83
Greensboro||	Monongahela.																																		1.05
Greensburg.	Youghiogheny.					.03	.15	.13																										1.44	
Greenville.	Ohio.					.85	1.32	.09																									4.35		
Grove City.	do.	.31	.57	.11																														2.83	
Horn Island Dam||	Allegheny.					T.	T.	.44																										1.62	
Indiana.	do.					.10	.21																										1.89		
Irwin.	Monongahela.					.17	.35																										1.01		
Johnstown.	Allegheny.					.03	.08	.01																									1.53		
Lock No. 4||	Monongahela.					T.		.35	T.																									1.36	
Lycippus.	Allegheny.					T.		.22																										2.04	
Parkers Landing||	do.					T.		.36																										2.04	
Pittsburg.	Ohio.	.01	.56	.01																														1.69	
Saegerstown.	Allegheny.	.07				.34	1.30	.22																									5.23		
Saltsburg||	do.					.10	.02	.01																									1.82		
Skidmore.	Ohio.					.25																												1.85	
Somerset.	Youghiogheny.					T.																												1.58	
Springdale||	Allegheny.					.09		.60																									2.20		
Uniontown.	Monongahela.																																	1.48	
Warren.	Allegheny.	.06				.70	.64	.26																									3.92		
West Newton||	Youghiogheny.					.01	T.	.42																									1.35		
Maryland.																																			
Deer Park.	Youghiogheny.							.15	.13																									1.31	
Grantsville.	do.							.20	.03																								1.44		
Oakland.	do.							.23	.15																								1.75		
West Virginia.																																			
Bancroft||	Great Kanawha.							.73	.05	.03																							1.44		
Beckley.	do.																																	1.89	
Ben's Run.	Ohio.	1.05	.17																															3.05	
Bluefield.	Great Kanawha.					.75	.20																										2.51		
Brandoville||	Monongahela.					.21	.10																										1.71		
Buckhannon.	do.					.62	.15																										2.31		
Cairo.	Little Kanawha.	.60																																2.08	
Central Station.	Middle Island Creek.	T.				.48																											1.46		
Charleston||	Great Kanawha.					.30	.02																										1.62		
Creston||	Little Kanawha.					.53	.04																									1.94			
Cuba.	Sand Creek.					.49	.03																									0.94			
Davis||	Monongahela.					.10																											1.40		
Elizabeth.	Little Kanawha.					.70	.04																									1.78			
Elkhorn.	Big Sandy.	.71	.10																														2.40		
Elkins.	Monongahela.	.13	.20	.25																													2.21		
Fairmont.	do.					.24	.04																									1.50			
Glenville||	Little Kanawha.					.38	T.																										1.98		
Grafton.	Monongahela.					.48	.05																									2.64			
Green Sulphur Springs.	Great Kanawha.	.19				.36	.42	.01																								1.84			
Hinton||	do.	.06				.24	.16	.12																								1.42			
Lewisburg.	Great Kanawha.					.10																											1.18		
Logan.	Guyandotte.					T.	.60	.50																								2.30			
Lost Creek.	Monongahela.					T.	.31	.08																								1.55			
Madison.	Great Kanawha.					.50	.08	.20																							2.07				
Mannington.	do.					.65	.33																									1.51			
Marlington.	do.					.07	1.00																									2.03			
Morgantown.	Monongahela.					T.	.40																									1.77			
Moundsville.	do.					.40																										2.03			
New Cumberland.	Great Kanawha.</																																		

TABLE 2.—*Daily precipitation for October, 1910. District No. 3—Continued.*

TABLE 2.—*Daily precipitation for October, 1910. District No. 3—Continued.*

Stations.	River basins.	Day of month.																														Total.		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Tennessee—Cont'd.																																		
Benton	Tennessee							.05	.55	.76																								2.04
Bird's Bridge|||	do	.17						.58	.11																								1.90	
Bluff City|||	do																																	2.16
Byrdstown	Cumberland							1.80																									2.70	
Carthage|||	do							.72	1.55	.02																						3.40		
Cedar Hill	do																																	
Celina|||	Cumberland																																	3.34
Center Point	Tennessee	.15	.10	.12	T.	.20																											3.09	
Charleston|||	do							.15	.84	.07	T.																					1.21		
Chattanooga		.09						1.20	.05	.27																						2.29		
Clarksville	Cumberland	.68	.81	.25																													4.58	
Clinton|||	Tennessee							T.		.55	T.																					1.05		
Dandridge|||	do	.80						T.	T.	.37	.78	.04																			2.32			
Decatur	do																																1.80	
Dickson	Cumberland																																3.40	
Dover	do																																6.27	
Dunlap	Tennessee	.01	T.	T.																													2.21	
Elizabethhton|||	do							T.	T.	.72																						1.52		
Erasmus	Cumberland																																3.19	
Florence	do																																2.79	
Franklin	do																																2.62	
Hall's Hill|||	do																																4.33	
Harriman	Tennessee																																1.99	
Hohenwald	do																																2.71	
Iron City	do																																4.61	
Jefferson City	do																																1.17	
Johnson City|||	do	.03																															2.15	
Johnsonville	do																																4.34	
Jonesboro	do																																	
Kingston|||	do																																1.17	
Knoxville	do																																1.68	
Lebanon	Cumberland																																3.28	
Lewisburg	Tennessee																																3.80	
Livingston	Cumberland																																	
Loudon|||	Tennessee																																1.25	
Lynnyville	do																																3.23	
McGhee|||	do																																1.36	
McMinnville	Cumberland																																4.67	
Maryville	Tennessee																																	
Mountain City	do																																2.42	
Nashville	Cumberland																																3.20	
Newport	Tennessee																																2.20	
New River|||	Cumberland																																3.50	
Palmetto	Tennessee																																2.79	
Pinewood	do	.43	.08	.60	.03																											3.11		
Pope	do	.90	*	*	*																												4.35	
Rogersville|||	do	.24																															1.46	
Rugby	Cumberland																																3.24	
Savannah	Tennessee																																3.51	
Sevierville	do																																1.58	
Sewanee	do																																4.46	
Sparta	Cumberland																																4.22	
Springdale	Tennessee																																	
Springville	do																																7.23	
Tazewell|||	do																																1.39	
Tullahoma	do																																4.28	
Walling|||	Cumberland	.01																															3.48	
Waynesboro	Tennessee																																3.18	
Wildersville	Cumberland																																5.06	
Worsham|||	do																																4.55	
Yukon	do																																4.38	
Kentucky																																		
Alpha	Cumberland																																3.40	
Anchorage	Ohio	.91	1.70	3.38																												6.37		
Bardstown	do																																3.60	
Beattyville|||	Kentucky																																	

TABLE 2.—*Daily precipitation for October, 1910. District No. 3—Continued.*

TABLE 3.—Maximum and minimum temperatures at selected stations, October, 1910. District No. 3, Ohio Valley.

Date.	Pennsylvania.				West Virginia.												Ohio.											
	Greenville.		Pittsburg.		Charleston.		Elkhorn.		Elkins.		Glenville.		Huntington.		Morgantown.		Parkersburg.		Wheeling.		Canton.		Cincinnati.		Columbus.		Dayton.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1...	77	51	79	58	83	60	78	53	78	57	86	55	85	57	82	63	86	62	84	51	76	58	86	61	80	54	84	60
2...	64	38	66	49	84	55	80	55	70	43	80	42	76	54	75	62	73	49	71	45	65	43	76	53	69	47	77	41
3...	82	38	84	48	85	54	79	55	85	40	89	43	88	51	88	51	89	47	87	43	82	46	89	60	88	53	89	52
4...	80	40	83	68	85	65	77	62	80	63	85	57	86	52	85	64	84	67	83	46	81	57	80	69	81	68	84	60
5...	71	63	82	69	87	65	82	65	83	67	89	65	88	62	97	68	85	72	84	67	74	65	73	65	74	64	72	63
6...	69	51	81	52	85	66	82	67	82	57	88	69	80	70	82	66	80	53	80	68	67	50	37	49	36	47	62	48
7...	61	41	60	50	74	52	73	51	57	50	70	52	60	50	67	49	62	51	65	51	54	43	62	45	61	44	61	41
8...	65	32	63	42	66	52	70	48	59	49	61	46	65	50	91	44	63	46	67	41	62	40	69	46	66	59	63	49
9...	61	40	61	49	71	54	67	45	48	72	51	72	50	66	52	63	46	68	43	59	43	70	49	62	48	67	42	
10...	63	41	62	48	69	44	68	41	63	40	68	42	38	41	62	45	64	47	69	45	62	46	65	45	63	48	67	41
11...	75	35	72	45	73	45	73	35	76	38	74	41	73	38	75	39	76	43	70	40	76	45	74	43	75	39		
12...	61	36	69	50	76	44	74	42	74	36	79	38	77	42	76	50	79	44	77	41	70	45	74	47	73	49	77	42
13...	66	33	68	41	78	49	73	46	78	39	81	45	81	45	78	46	80	49	74	41	69	40	80	52	76	46	86	44
14...	81	43	77	57	78	56	73	47	72	46	80	46	78	48	77	56	80	60	81	44	76	53	78	62	78	59	81	67
15...	70	45	75	60	80	58	73	48	75	51	81	53	80	54	77	60	81	57	80	52	73	55	83	57	78	63	81	54
16...	74	49	76	58	79	50	76	52	76	54	83	53	82	55	79	61	83	58	82	52	74	54	84	58	82	57	84	53
17...	77	35	73	50	81	59	79	49	78	52	82	55	83	56	80	53	84	57	78	52	73	51	85	60	82	55	86	55
18...	82	46	80	56	81	56	76	52	81	48	84	54	84	55	80	56	81	55	85	54	80	54	83	59	82	54	84	49
19...	78	46	71	52	80	50	72	57	74	54	83	42	84	56	82	53	80	50	84	44	76	50	80	58	80	55	84	49
20...	80	50	78	56	81	57	77	57	84	57	83	57	82	50	77	60	81	55	84	47	78	52	70	58	71	57	81	51
21...	76	55	80	57	82	56	78	50	80	49	84	51	83	57	83	50	82	56	83	55	76	56	68	47	77	46	72	51
22...	67	43	59	44	81	48	72	47	68	42	74	40	55	47	72	44	58	44	50	46	60	42	58	45	63	43	55	43
23...	57	37	53	43	61	39	68	35	54	33	60	32	62	37	56	39	50	40	52	37	54	40	62	37	59	31	61	34
24...	63	29	62	38	66	38	64	33	63	29	66	32	69	35	62	34	65	34	68	36	60	35	67	30	63	40	64	35
25...	55	42	55	43	66	46	81	38	56	37	61	40	68	36	53	44	58	42	60	36	53	41	61	45	66	41	61	46
26...	52	33	58	41	67	41	65	33	60	34	66	35	68	37	61	37	66	39	66	37	58	39	71	44	64	42	67	37
27...	58	42	64	38	67	43	63	44	64	39	67	42	64	44	66	44	64	44	66	43	68	41	70	39	63	35	55	31
28...	43	33	40	33	54	36	49	30	39	30	50	34	44	33	47	33	44	35	46	34	41	33	41	33	41	31	46	31
29...	40	22	37	29	46	32	34	26	35	23	50	30	45	32	39	27	38	30	42	27	39	28	44	29	39	28	43	29
30...	48	24	46	28	65	33	47	19	47	23	51	22	53	25	46	25	49	26	51	22	49	29	55	30	50	27	54	26
31...	61	29	59	40	65	33	60	25	60	30	62	25	62	33	59	39	61	41	65	24	63	35	65	41	59	37	62	38
Mns	66.4	39.9	67.1	48.1	72.5	50.0	69.8	45.5	68.0	43.6	73.0	44.7	72.3	46.6	70.4	48.8	71.1	48.2	71.5	43.9	65.8	45.5	70.6	49.5	68.0	47.5	70.3	45.0

Date.	Ohio.				Virginia.				Asheville, N. C.				Decatur, Ala.				Tennessee.				Kentucky.							
	Marion.		Waverly.		Big Stone Gap.		Wytheville.		Chattanooga.		Jonesboro.		Knoxville.		Nashville.		Palmetto.		Sparta.		Waynesboro.		Beattyville, Ky.					
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.				
1...	79	57	90	48	78	58	76	52	77	56	90	65	87	62	...	...	85	63	89	62	91	63	88	60	88	56	88	54
2...	77	39	87	46	81	59	80	62	84	54	93	65	89	63	...	...	87	59	91	60	93	57	89	55	91	56	88	53
3...	58	49	93	44	80	58	69	57	70	54	89	63	84	61	...	...	86	61	88	63	87	57	87	55	92	59	88	52
4...	78	66	87	63	79	65	72	60	73	63	83	66	79	68	...	...	82	63	81	75	85	72	86	62	81	71	85	52
5...	71	64	84	67	80	59	78	63	76	63	96	72	79	69	...	...	82	64	82	67	84	70	82	71	80	70	89	58
6...	66	48	79	53	83	64	79	64	76	61	76	73	73	58	...	...	84	55	76	58	74	54	88	50	74	59	88	53
7...	64	39	67	48	65	53	64	51	61	54	71	58	82	55	...	...	80	54	66	52	88	51	67	49	74	58	88	54
8...	72	36	75	41	70	53	55	49	61	53	68	55	65	56	...	...	69	56	74	55	67	53	72	55	71	67	48	
9...	70	44	70	45	72	56	68	50	71	54	79	57	79	60	...	...	76	57	78	53	79	54	80	50	77	51	74	
10...	71	42	72	53	69	43																						

TAB *Maximum and minimum temperatures at selected stations, October, 1910. District No. 3—Continued.*